Immersive Environments in ADL

Mr. Peter Smith, Lead, ADL Immersive Learning Team

08/20/2009





Potential of Immersive Environments

Current beliefs

- Better than conventional CBT
- Faster than classroom
- Cheaper than simulation

Issues

- Currently not enough research
- No standards/metrics for doing research
- No agreed upon definitions



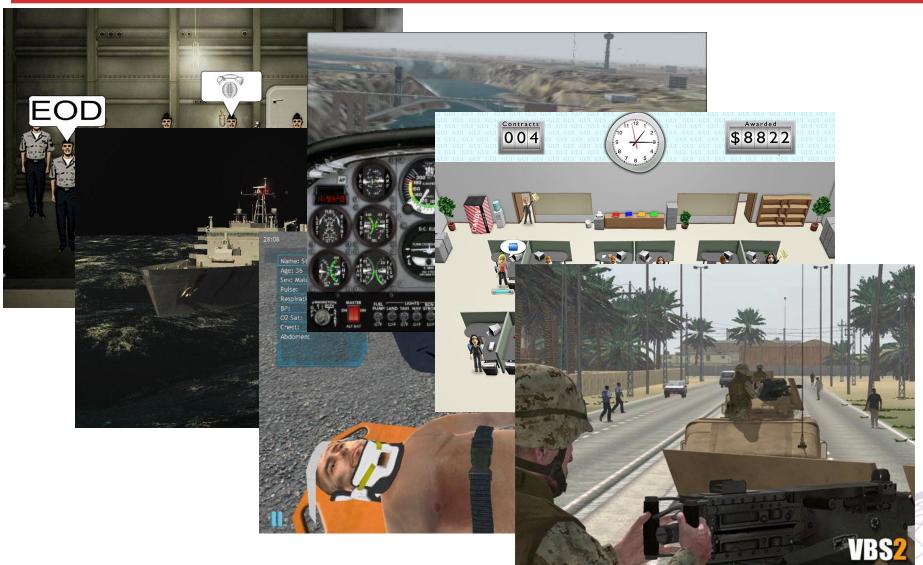
The Market is Quickly Growing

- Offer new ways to do old things
 - Learn
 - Experience
 - Motivate
 - Interact/Immerse
 - Observe
- Target a wide array of audiences
 - Business
 - Training
 - Education
 - Entertainment
 - Community





Lots of Current Development



4

Games





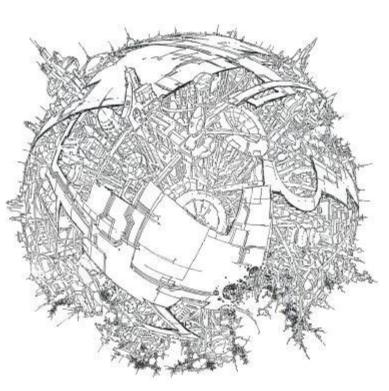


Features of Games

- System/Simulation
 - Underlying model that makes the game work
- Players/Interaction
 - Interact with and control a game
- Artificial/Narrative
 - A game has a boundary from the "real world"
- Conflict/Challenge
 - Game is contest between players and system or others
- Rules
 - Delimit what the player can do
- Outcomes/Feedback
 - Games have quantifiable goals outcomes

Virtual Worlds







Virtual Worlds

Virtual worlds have six features in common

- Co-existence
- Graphical User Interface
- Presence
- Interactivity
- Persistence
- Socialization/ Community-building



www.qwaq.com



Interoperability

Virtual worlds are closed environments today

- 3-D, immersive environment
- Boutique-style
- Online
- Robust social media
- Asynchronous/Synchronous



...but we hope to one day have open virtual worlds.

Web 2.0
Leveraging Browser-based Tools





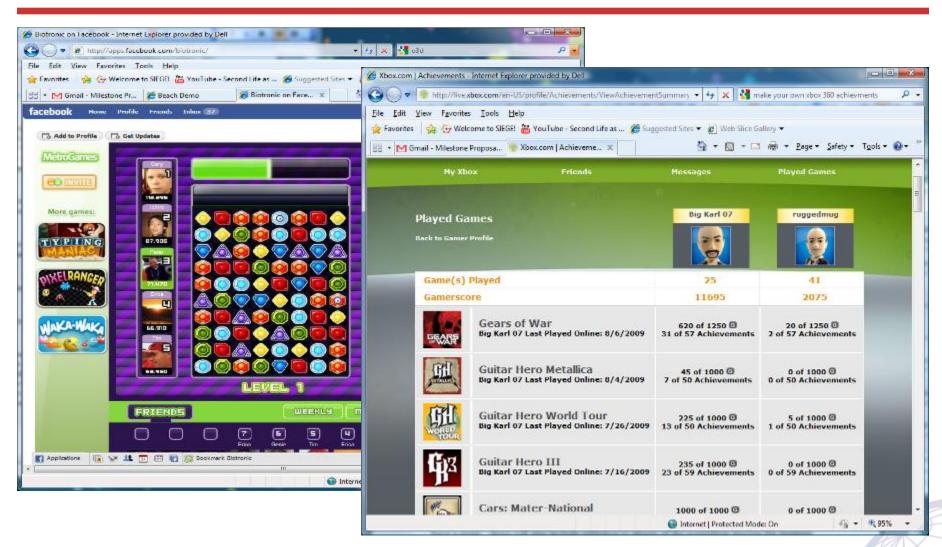
Conventional Web 2.0 Overview

- Incoming knowledge tools
 - Google RSS Reader Cloud Blog reader, notes storage & sharing
 - LinkedIN business "group" connection making/tracking, Q&A
 - Twitter
 - Facebook social "group" software
- Outgoing knowledge tools
 - Wordpress Blog creator
 - Wiki
 - Microsoft Live Mesh & SkyDrive Live



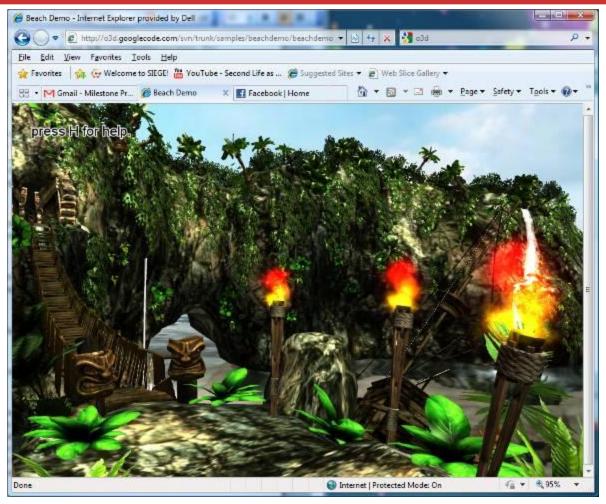


Knowledge Tracking and Storing





In Browser 3-D





Questions or Comments?

Peter Smith

Team Lead, Immersive Learning Technologies
peter.smith.ctr@adlnet.gov
+1.407.384.5572